## **CLAIMS**

Please amend the presently pending claims as follows:

## 1-18. Cancelled.

- 19. (Currently Amended) Method for reception of radio data transmitted between at least two emitters base stations and one receiver mobile terminal wherein the method comprises:
  - a first step of receiving data transmitted by a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a sequence in time of symbols comprising firstly information data elements, and secondly reference elements called pilots,
    - said pilots being distributed within the information data elements according to a predetermined pattern, and having a for which the value during at emission is known to by the receiver mobile terminal,
    - at least two of the <u>emitters base stations</u> using distinct pilot patterns such that at any given moment and at any given frequency, the <u>receiver mobile terminal</u> can only receive one pilot from the <u>emitters base stations</u>;
  - a second step of identifying the <a href="mailto:emitterbase station">emitterbase station</a>, which emitted the data, using a control information transmission signal, which allows notably the <a href="mailto:receivermobile">receivermobile</a> terminal, upon data reception, to identify the <a href="mailto:emitterbase station">emitterbase station</a> that emitted <a href="mailto:themthe data">themthe data</a>; and
  - a third step of determining the pilot pattern used by the identified emitter base station.
- 20. (Currently Amended) Method for reception of data according to claim 19, wherein, when the pilot pattern was generated using a generation function for which one parameter is an identifier of the associated emitter base station, the step of determining implements the generation function as a function of the identified emitter base station.

- 21. (Currently Amended) Method for reception of data according to claim 19 and further comprising a step for extracting the pilots from the multicarrier data transmission signal, and a step for estimating the <u>a</u> transfer function of a transmission channel associated with the multicarrier data transmission signal.
- 22. (Currently Amended) Method for reception of data according to claim 19, wherein the multicarrier data transmission signal is of the an OFDM type.
- 23. (Currently Amended) Method for reception of data according to claim 19, wherein each of the emitters base stations uses a specific pilot pattern.
- 24. (Currently Amended) Method for reception of data according to claim 19, wherein said method is implemented in a cellular radio communication network, and the emitters base stations are base stations of the network, and the receiver is a mobile terminal.
- 25. (Currently Amended) Cellular radio communication system comprising:
  - at least two emittersbase stations and one receivermobile terminal, implementing a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots, said pilots being distributed within the information data elements according to a predetermined pattern, and havingfor which the a value at on emission is known byto the receivermobile terminal;
  - wherein at least two of the emitters base stations use distinct pilot patterns, such that only one pilot can be received by the receiver mobile terminal from the emitters base stations, at a given time and at a given frequency; and

## wherein said receiver mobile terminal comprises:

first means of receiving data transmitted by the multicarrier data transmission

signal;

second means of identifying the <a href="mailto:emitterbase station">emitterbase station</a> that emitted the data, using a control information transmission signal, which allows notably the <a href="mailto:receivermobile terminal">receivermobile terminal</a> to identify the <a href="mailto:emitterbase station">emitterbase</a> station that emitted the data when <a href="mailto:it-the mobile terminal</a> receives <a href="mailto:the mobile terminal</a> receives <a href="mailt

26. (Currently Amended) Mobile <u>terminal</u> in a cellular radio communication system, comprising:

means of receiving radio data transmitted by at least two emitters base stations, in the form of a multicarrier data transmission signal, the multicarrier data transmission signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots, said pilots being distributed within the information data elements according to a predetermined pattern, and having afor which the value on at emission is known by to the mobile terminal, at least two of the emitters base stations using distinct pilot patterns, such that only one pilot can be received by the receiver mobile terminal from the emitters base stations, at a given time and at a given frequency;

means of receiving data transmitted by the multicarrier data transmission signal;
means of identifying the emitterbase station that emitted the data, using a control
information transmission signal, which allows notably the receivermobile terminal
to identify the emitterbase station that emitted the data when it—the mobile
terminal receives them the data; and

means of determining the pilot pattern used by the identified emitterbase station.

27. (Currently Amended) A cellular radio communication mobile comprising a receivermobile terminal adapted to receive radio data transmitted by at least two emitters base stations, in the form of a multicarrier data transmission signal, the multicarrier data transmission

signal being formed from a time sequence of symbols composed firstly of information data elements and secondly of reference elements called pilots,

said pilots being distributed within the information data elements according to a predetermined pattern, and having a for which the value aton emission is known to by the mobile terminal, at least two of the emitters base stations using distinct pilot patterns, such that only one pilot can be received by the receiver mobile terminal from the emitters base stations, at a given time and at a given frequency, wherein the receiver mobile terminal is adapted to identify the emitter base station that emitted the data, using a control information transmission signal, which allows the receiver mobile terminal to identify the emitter base station that emitted the data when it—the mobile terminal receives them the data, and to determine the pilot pattern used by the identified emitter base station.